

**PRODUCTION OF ALPHA-OLEFIN OLIGOMER**

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**Abstract of JP8239330**

**PURPOSE:** To obtain an  $\alpha$ -olefin oligomer in high yield and selectivity by realizing selective trimerization of the  $\alpha$ -olefin using a specific chromium catalyst in the presence of a specific amount of water. **CONSTITUTION:** Using, as a chromium catalyst, a catalyst system comprising (a) a chromium compound such as chromium (III) 2-ethylhexanoate; (b) at least one selected from amines, amides and imides such as 2,5-dimethylpyrrol and (c) an alkylaluminum such as triethylaluminum, an  $\alpha$ -olefin such as ethylene is reacted in the presence of water at 0-250 deg.C under normal pressure to 250kg/cm<sup>2</sup> for 1 minute to 20 hours. The amount of the water is 0.01-1.5 mole based on the compound (c). The molar ratio of the catalyst components is a:b:c=1:(0.1-10):(1-100). In a preferred embodiment,  $\alpha$ -olefin is reacted with a chromium catalyst in such a state that the component (a) does not contact with the composition (c).

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